

REMARKS

In the Office Action, claims 17-22 and 27-29 were examined and stand rejected. In response to the Final Office Action, no claims are amended, no claims are canceled and no claims are added. Applicants respectfully request reconsideration of pending claims 17-22 and 27-29, in view of the following remarks.

I. 35 U.S.C. §§ 102 and 103: Rejection of Claim 27

The Patent Office rejects Claim 27 under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,166,439 issued to Cox ("Cox"). Applicants respectfully traverse this rejection.

Regarding Claim 27, Claim 27 recites the following claim features, which are neither disclosed nor suggested by Cox:

- at least one bond pad formed directly on the insulating layer;
- a composite film comprising:
 - a first layer, and
 - a second layer of a material different than a material of the first layer,
- wherein the first layer is disposed between the insulating layer and the second layer,
- wherein the first layer and the second layer comprise one common chemical element other than silicon, and
- wherein the second layer is a passivation layer formed on the first layer and a portion of a surface of the bond pad that is less than the entire surface. [Emphasis added.]

The Patent Office cites conductive line 54 to describe a "bond pad formed directly on the insulating layer", as described for claim 27. However, the Patent Office has not cited and Applicants are unable to find any description in Cox that conductive line 54 is a bond pad. For example, according to Applicants' Specification, without limitation thereto, it may be necessary to supply voltage signals to bond pads from a package to which the integrated circuit device is affixed (see Applicants' Specification page 8, lines 15-18), and such bond pads may be located around the periphery of the top surface of an integrated circuit device (see page 8, line 26 through page 9, line 1). On

the other hand, Cox describes conductive lines 54, 56, and 58 as making up conductive pattern 52, such as many thousands or even millions of conductive lines that exist in an integrated circuit to provide necessary electrical connections between devices of the integrated circuit (see col. 6, lines 1-8). Hence, since the conductive lines of Cox do not disclose the bond pad of claim 27, Applicants respectfully request the Patent Office to withdraw the rejection above.

In addition, the Patent Office cites Fig. 4h of Cox against a passivation layer formed on the first layer and a portion of a surface of the bond pad, as required by claim 27. However, in Fig. 4h it is clear that no such layer exists. Specifically, there is no layer shown that is formed on layer 61, as well as on a top surface of conductive line 54. Hence, for at least this additional reason, Applicants respectfully request the Patent Office withdraw the rejection above.

II. 25 U.S. C. §103(a): Rejection of Claims 17-19, 21-22 and 29

The Patent Office rejects claims 17-19, 21, and 22 under 35 U.S.C. §103(a) as obvious over Cox in view of Applicants' Prior Art ("APA"). Applicants respectfully traverse the Patent Office's rejection.

Applicants respectfully disagree for at least the reason that the cited references do not teach or suggest a bond pad formed directly on the insulating layer, or a passivation layer formed on a surface of the adhesion layer and a portion of a surface of the bond pad, as required by claim 17.

An argument analogous to the one above with respect to claim 27 and Cox applies here, as well.

In addition, the Patent Office cites here that it would have been obvious to modify the semiconductor of Cox to include a first passivation layer as disclosed in APA. However, this fails to teach or suggest the above noted limitation of claim 17 for two reasons.

First, APA does not teach or suggest forming a passivation layer on an adhesion layer.

Second, the primary purpose of Cox is to provide LDC material 59 attached to adhesion promoter layer 61 and between conductive lines 54, 56, and 58. Hence, the teachings of Cox do not permit a passivation layer between adhesion promoter layer 61 and LDC material 59.

Moreover, a principle of operation of Cox is that the material and thickness of topside layer 90 is selected for optimum reduced capacitance, is preferably less than about 2 microns thick, and is substantially transparent to UV light, so that UV light may be used to erase reprogrammable cells, such as EPROM integrated circuitry (see col. 8, line 66 through col. 9, line 41). Thus, there is no motivation in Cox to form a layer in addition to topside layer 90 over conductive lines 54, 56, and 58. For example, forming LCD material 59 over conductive line 54 would defeat the principle of operation of the material, thickness, and UV light transparency of topside layer 90. Hence, for at least this additional reason, Applicants respectfully request the Patent Office withdraw the rejection above.

Claims 18, 19, 21 and 22 depend from claim 17 and therefore contain all the limitations of that claim. For at least the reasons stated with respect to claim 17, claims 18-9 and 21-22 are not obvious over the cited references. Applicants respectfully request that the Patent Office reconsider and withdraw the §103(a) rejection of claims 12, 18, 19, 21 and 22.

III. 25 U.S.C. §103(a): Rejection of Claim 20

The Patent Office rejects claim 20 under 35 U.S.C. §103(a) as obvious over Cox in view of APA and U.S. Patent No. 6,046,101 issued to Dass, et al. ("Dass"). Dass is cited for disclosing an adhesion layer of silicon oxynitride. Applicants respectfully traverse the Patent Office's rejection.

Regarding claim 20, claim 20 is dependent from claim 17. Applicants respectfully disagree with the rejection above as under 35 U.S.C. §103(c) Dass is disqualified prior art against the claimed invention, because the subject matter of the claimed invention and Dass were, at the time the invention was made, owned by the same person or subject of an obligation of assignment to the same person (e.g., Intel Corporation). Hence, for at least this additional reason, Applicants respectfully request

the Patent Office withdraw the rejections above of claim 20, 28, and 29. Thus, Applicants respectfully submit that the Patent Office's citing of Dass fails to rectify the deficiencies of Cox and APA for a 35 U.S.C. §103(a) rejection, for at least the reasons described above. Hence, Applicants respectfully submit that claim 20 is patentable over the combination of Cox in view of APA and further in view of Dass.

In addition, Applicants respectfully disagree with the rejection but for at least the reason that the Patent Office's motive to combine the references, which is to include silicon oxynitride as disclosed in Dass as the adhesion layer of Cox would protect the conductive structure from contamination, is insufficient. The Patent Office has not cited and Applicants are unable to find any motive, teaching or suggestion in Cox that adhesion promoter layer 61 and/or LDC material 59 would be insufficient in protecting the conductive structure from contamination. Hence, for at least this additional reason, Applicants respectfully request the Patent Office to withdraw the rejection above.

IV. 35 U.S.C. §103(a): Rejection of Claim 28

The Patent Office rejects claim 28 under 35 U.S.C. §103(a) as obvious over Cox in view of Dass. Applicants respectfully traverse the Patent Office's rejection.

Hence, Applicants respectfully submit that Dass fails to rectify the deficiencies of Cox and APA noted above for claim 27. Thus, Applicants' respectfully request the Patent Office withdraw the rejection above for at least the reason that claim 28 depends from allowable claim 27.

Moreover, Applicants respectfully request the Patent Office to withdraw the rejection above for at least the reason that the cited references fail to teach or suggest the first layer includes silicon oxynitride, as required by claim 28. An argument analogous to the argument above, with respect to claim 20 applies here as well. Hence, for at least this additional reason, Applicants respectfully request the Patent Office withdraw the rejection above.

V. 35 U.S.C. §103(a): Rejection of Claim 29

The Patent Office rejects claim 29 under 35 U.S.C. §103(a) as obvious over Cox in view of Dass and APA.

Claim 29 depends from claim 27. Hence, for at least the reasons described above with respect to claim 27, Applicants respectfully request the Patent Office withdraw the rejection above.

In addition, claim 29 depends from claim 28. Hence, for at least the additional reasons described above with respect to claim 28, Applicants respectfully request the Patent Office withdraw the rejection above.

Any dependent claims not mentioned above are submitted as not being anticipated or obvious, for at least the same reasons given above in support of their base claims.

It should be noted that not all of the assertions made in the Office Action, particularly those with respect to the dependent claims, have been addressed here, in the interest of conciseness. Applicants reserve the right to challenge any of the assertions made in the Office Action by the Examiner, with respect to the relied upon art references and how they would relate to Applicants' claim language.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance, and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: May 25, 2006

By 
Angelo J. Gaz, Reg. No. 45,907

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being transmitted via facsimile to the Patent and Trademark Office, Mail Stop AF, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450, on May 25, 2006.


Amber Saunders May 25, 2006